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(54) Title: POLYPROPYLENE CABLE JACKET COMPOSITIONS WITH ENHANCED MELT STRENGTH AND PHYSICAL PROPERTIES

(57) Abstract: The present invention is a cable comprising one or more telecommunication or power transmission media or a core of two or more such media, each medium or core surrounded by at least one jacketing or sheathing layer comprising a polypropylene homopolymer or copolymer and having a relaxation spectrum (RSI) and melt flow (MF) such that RSI^*MF^a is greater than about 12 when a is about 0.5. Significantly, the jacketing or sheathing layer exhibits advantaged extrusion fabrication characteristics, resulting from the propylene polymer having enhanced rheology properties (as demonstrated by its high relaxation spectrum index (RSI)). Additionally, the propylene-based polymer composition of the present invention exhibits relatively high melt strength compared to compounds of conventional propylene polymers or ethylene polymers. In fiber optic cable jacketing applications, the present invention advantageously balances low post extrusion shrinkage with high modulus/deformation resistance.

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